

LIS008164655B2

(12) United States Patent

Lablans

(54) SYSTEMS AND METHODS FOR CONCURRENTLY PLAYING MULTIPLE IMAGES FROM A STORAGE MEDIUM

(75) Inventor: Peter Lablans, Morris Township, NJ

(US)

(73) Assignee: Spatial Cam LLC, Morristown, NJ (US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 315 days.

(21) Appl. No.: 12/435,624

(22) Filed: May 5, 2009

(65) **Prior Publication Data**

US 2009/0284620 A1 Nov. 19, 2009

Related U.S. Application Data

- (60) Provisional application No. 61/089,727, filed on Aug. 18, 2008, provisional application No. 61/055,272, filed on May 22, 2008, provisional application No. 61/054,290, filed on May 19, 2008.
- (51) Int. Cl. H04N 5/76 (2006.01) H04N 7/18 (2006.01) H04N 5/225 (2006.01) H04N 5/222 (2006.01)

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

4,782,402	Α		11/1988	Kanamaru	
5,257,324	Α	*	10/1993	Bumgardner	 382/298
5.343.243	Α		8/1994	Maeda	

(10) Patent No.: US 8,164,655 B2 (45) Date of Patent: Apr. 24, 2012

5,434,617 A *	7/1995	Bianchi 348/170				
5,557,328 A *	9/1996	Ishihama et al 348/240.3				
5,568,192 A	10/1996	Hannah				
5,646,679 A	7/1997	Yano et al.				
5,680,649 A	10/1997	Akimoto et al.				
6,178,144 B1	1/2001	Huiber				
6,282,320 B1	8/2001	Hasegawa et al.				
6,323,858 B1	11/2001	Gilbert et al.				
6,574,417 B1	6/2003	Lin et al.				
6,669,346 B2*	12/2003	Metcalf 353/94				
6,727,941 B1	4/2004	Coleman				
6,885,374 B2	4/2005	Doyle et al.				
6,961,055 B2	11/2005	Doak et al.				
6,972,796 B2*	12/2005	Katta et al 348/333.01				
7,020,888 B2	3/2006	Reynolds et al.				
7,085,484 B2	8/2006	Hara				
7,102,686 B1	9/2006	Orimoto et al.				
(Continued)						

OTHER PUBLICATIONS

PCT International Search Report and Written Opinion in PCT/US2009/043075, (Jul. 6, 2009), 12 pgs.

(Continued)

Primary Examiner — Jason Chan
Assistant Examiner — Pritham Prabhakher

(57) ABSTRACT

Methods for storing on a storage or memory medium, and retrieving, and displaying of multiple images in a registered manner, the images have been recorded concurrently. The images may comprise at least 2 video programs. A camera system for recording multiple concurrent images is also disclosed. Lenses and corresponding image sensors are calibrated to have calibrated and associated settings for recording multiple images that are substantially registered images. A registered image may be displayed on a single display. It may also be displayed on multiple displays. A camera for recording and displaying registered multiple images may be part of a mobile phone.

20 Claims, 31 Drawing Sheets

